SECTION VI

PLANNING ISSUES AND MANAGEMENT OBJECTIVES

6.1. PROJECT GOAL

The goal of the Rivers Project Master Plan is to provide the Rivers Project area with a master planning document that will authorize and/or facilitate existing and future management activities for the benefit and protection of all natural and constructed resources under Rivers Project Office jurisdiction. Sustainable plans within a river basin-wide context responsive to customer and partner needs will be developed to improve:

- Visitor Services
- Recreational Opportunities
- Biological Diversity/Resource Stewardship
- Environmental Engineering Activities
- Environmental Education Programs
- Economic Development

6.2. RIVERS ISSUES AND RESOURCE MANAGEMENT OBJECTIVES DEVELOPMENT

The process used to develop planning issues and management objectives for the Master Plan is described in Paragraph 5.7 — Agency and Public Involvement and Coordination on Master Plan Development. Public workshops were held during August and September 1992, and again during July 1997 to gather information concerning river issues and resource management objectives for the Master Plan. River planning issues are identified in Paragraph 6.3 and are listed from most important to least important, based on prioritization exercises from these workshops. Some of these issues are outside of Corps authority but are still documented because of their importance to the public and the overall health of the rivers. Resource use management objectives are identified in Paragraph 6.4 and are listed in random order and are within the existing authorities of the Corps River Project Office.

6.3. PLANNING ISSUES

Recreational Issues

- Evaluate and implement a plan of action to satisfy demand for improved public access to, and on, Corps-managed public lands and water for walking, hiking, biking, boating, hunting, fishing, wildlife viewing, etc.
- Evaluate and implement a plan of action to to satisfy demand for traditional public recreation facilities (campsites, picnic facilities, overlooks, all types of trails, boat ramps, courtesy day harbors, interpretive signs/exhibits, and parking lots).

- Measure current public visitation levels and evaluate impacts from Overuse and crowding on recreational use and environmental quality. Implement a plan of action to reduce any identified impacts.
- Evaluate and implement a plan of action to improve recreational use zoning and regulations for both consumptive and non-consumptive activities, such as hunting, trapping, fishing, camping, boating (including mooring), bird watching (nature study).
- Evaluate and implement a plan of action for recreational use zoning and regulations for designated quiet water or no-wake areas with more emphasis on natural resource protection, quality recreational opportunities and public safety concerns.
- Provide additional minimum public health and safety support facilities and services such as sanitary toilets, drinking water, trash collection, law enforcement, directional-regulatory signage and vehicle parking and turnarounds.
- Consider the physical and biological changes/impacts known to be associated with commercial navigation and recreational use of waterways for all water based management activities and plans.
- Resolve conflicts between navigation craft and recreation boats to improve public safety.
- Provide barrier-free access and facilities required by law for disabled persons on public lands.
- Evaluate demand for marina facilities on public lands and waters.
- Evaluate established private exclusive use of public lands through out-grants to determine impacts on public access to these areas.

Natural Resource Management Issues

- Adjust navigation pool regulation plan to optimize habitat conditions.
- Enhance conservation and protection of fish and wildlife resources, including endangered species.
- Pursue long-term holistic planning strategies that consider all impacts of decisions and actions on the river floodplain and watershed. (i.e. get away from the "Band-Aid" approach to solving resource problems.)
- Develop expanded sedimentation control/management strategies for the preservation of wetlands along the rivers.
- Establish an interagency agreement to address upland erosion problems that are negatively impacting the rivers.
- Manage the river in a manner as close to a "natural system" as possible (i.e., the way the river historically functioned prior to "human induced" changes.)
- Optimize resources, labor and funds for protection and restoration of habitats.
- Restore and protect the diversity of native riparian habitats on both open and forested public lands to assist with flood control, filtering of pollution, sediment reduction, improvement of fish and wildlife habitat, protection of endangered species and to offset dramatic basin wide losses of wetland habitat.
- Improve forest management along the river.

- Minimize activities which disturb the scenic beauty or aesthetics of the river.
- Eliminate and/or minimize negative natural resource use impacts.
- Improve planning and coordination for selecting dredge disposal sites.

Environmental Compliance Issues

- Improve the river's water quality to sustain healthy fish and wildlife populations, habitat conditions, recreation opportunities, and avoid negative affects to public water supply.
- Stop trash dumping and other littering that is occurring on public lands and waters that create aesthetic, health and safety problems.
- Maintain an overall quality environment on and along the river corridor.
- Give equal consideration to economic, environmental and social impacts associated with all plans.
- Control erosion to reduce sedimentation at the source(i.e. adjacent uplands and tributary watersheds.)
- Improve cooperation between city, state and federal agencies to resolve and mitigate environmental problems.
- Identify both point and non-point sources of water quality problems.
- Identify and protect unique or sensitive habitat areas and culturally significant sites.
- Stop unauthorized uses of public lands, such as agricultural trespass, timber theft, unpermitted docks and other structures, clearing of vegetation, unauthorized roadways, off-road vehicle (ORV) use, trash dumping, poaching, and placement of advertising signs that create negative environmental impacts.
- Assess and manage all human activities on Corps managed lands and waters along the river and on the floodplain.
- Resolve increasing tension/conflicts between economic and environmental interests and activities.
- Protect and/or restore unstable, disappearing or deteriorating riparian habitat on the river corridor.
- Further study the impacts of rapid pool on fish and wildlife and research and develop alternative solutions.
- Upgrade existing public use facilities that do not meet required minimum health and safety standards.
- Evaluate existing, and future public use needs to develop strategies
 to avoid resource degradation, as well as visitor saturation and
 carrying capacity problems, on public lands and waters with a view
 towards sustaining or increasing current levels of recreation/open
 space opportunities.
- Increase agency budgets to address environmental problems.
- Evaluate traditional motor vehicle access roads and trails leading to or on public lands.

• Continue to monitor and evaluate the impacts on riverine aquatic habitat by the various regulatory works structures (dikes, etc.) that are constructed to maintain the navigation channel.

Visitor Information and Education Issues

There is a need to:

- Develop a conceptual plan and model of the entire river basin for the 21st Century
- Provide more opportunities for communication between agencies, special interest groups and the general public.
- Implement more educational and research programs on the river.
 Topics should include water quality, history, culture, safety, recreation, nature and ecology.
- Expand public environmental education programs and facilities throughout the entire project area to enlist the public's awareness and support to enhance and protect the natural resources of the Mississippi River Valley.
- Expand current facilitation of public lands as outdoor classroom settings for schools to stimulate student interest and increase aptitude in the natural, physical and social sciences.
- Establish a network among local, state and federal conservation agencies concerning exchange of river-related information for public education and management purposes.
- Establish uniform, clearly written fishing, hunting and boating regulations throughout this state/federal multi-jurisdictional area.
- More effectively inform recreational users about special concerns and regulations regarding the use of public lands and waters.
- Increase public awareness that special use permits or other authorizations are required for bass tournaments and other organized special events and commercial activities on public lands.
- Establish a well coordinated program for collecting, analyzing and reporting data concerning boating accidents and other mishaps on public lands and waters.
- Inform the visiting public and adjacent landowners about navigational servitude, as related to public recreational use of waters.

Shoreline Management Issues

- Establish a plan to regulate private exclusive uses structures, such as boat docks, ramps and landings on public-owned shoreline and waters (i.e. primarily at cabin lease subdivisions) to maximize public access on public lands and waters and minimize shoreline/habitat degradation.
- Evaluate the impacts of commercial navigation craft fleeting on public land shoreline areas in terms of public use, shoreline stability, habitat conditions and sedimentation, and establish a sustainable plan to regulate fleeting.
- Note and consider in all management plans and actions that the majority of the shoreline on the pools is in private ownership, providing ample unrestricted opportunity for private development thus increasing public pressure and demand for recreational use of

- the existing public shoreline areas and increasing the value of these areas for open space, public access and protected habitat.
- Control flooding or flood proof developed areas. Pursue the removal of unnecessary structures on the floodplain
- Manage privately owned and permitted waterfowl blinds as temporary structures on public waters and shoreline areas and conduct compliance inspections annually as required by permit and federal regulation.

Navigation Management Issues

There is a need to:

- Maintain the reliability and integrity of the inland waterways transportation system.
- Reevaluate navigation operation and maintenance practices to minimize negative environmental affects.
- Reevaluate dredged material disposal practices to maximize beneficial uses of this material for fish and wildlife habitat, recreation site stabilization and ensure it is being performed in a manner that minimizes negative impacts to the resource.
- Evaluate and develop a plan of action to regulate barge fleeting areas on federally-owned shoreline areas.
- Better communicate to partners and to the public the justification for the current dredging effort to maintain the navigation channel.
- Improve communications about existing navigation pool water level regulation requirements and methodology to the public.

Economic Impacts Issues

There is a need to:

- Resolve conflicts between economic and environmental issues in all management plans and activities.
- Evaluate the type and extent of additional commercial/industrial development that might be sustained on public lands.
- Evaluate the extent to which the Corps is competing with the private sector by offering fleeting areas, marinas, other commercial services or private exclusive use activities.
- Work with river communities to promote eco-tourism and recreational use of the river to favorably impact socioeconomic conditions along the river.

General Management Issues

- Evaluate and minimize safety concerns when planning and implementing all activities.
- Establish a multi-agency overview or steering committee to address river related concerns in the region.
- Resurvey and maintain the public lands boundary to ensure it is clearly marked and known in all areas.

Historic Resources Management Issues

There is a need to:

- Create a mechanism to increase the coordination of river development and the protection of both the natural and historic resources.
- Conduct a systematic inventory of historic resources.
- Conduct a study/assessment of erosion rates and their effect on significant historic sites. This study should also include a proposed program of shoreline stabilization to protect important sites.
- Increase attention to the educational value of the waterways historical resources and the 10,000 year history of importance they have played in the region.
- Maintain full compliance with the National Historic Preservation Act, Sections 106 and 110, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and relevant Illinois and Missouri Historic Resources Acts on federal public lands along the waterways.

6.4. RESOURCE USE MANAGEMENT OBJECTIVES

Nine major resource use objectives, applicable to the Rivers project as a whole are presented below. These objectives were established based on public and agency input and are formulated so as to provide general guidance and direction to the overall management and development of the Rivers Project resources.

General Administration and Management

- Ensure that quality administration and management of all project lands, waters and other associated constructed and natural resources are consistent and thorough.
- Seek to continually increase efficiency, cost effectiveness and innovation in projects while keeping public use and enjoyment a goal of achievement.
- Ensure that all project activities address safety concerns.
- Ensure that all project administration and management decisions and actions adhere to all applicable laws, regulations, policies, and agreements.
- Develop consistent coordination and partnership efforts, both internally and with other applicable federal, state and local government agencies, private organizations and individuals.
- Implement all actions and plans in a manner compatible with authorized project purposes and all applicable social and environmental and safety factors, to ensure maximum benefits. Compromise will be considered when appropriate to minimize conflicts in project uses and developments.
- Identify facilities for rehabilitation or replacement.
- Provide efficient support facilities for public health and safety.
- Provide accessible facilities.
- Maintain a strong public education program.
- Provide sound environmental stewardship of public lands and waters.

- Maintain the integrity of the operational structures (i.e., the locks and dams and the navigation channel).
- Accommodate hydropower if feasible and compatible with other project purposes.

Recreation Related Objectives

Quality Recreational Experiences

- Seek to increase the quality of visitor's experience by maintaining and developing purposeful, functional recreation facilities and services that meet the needs of visitors, while maintaining the aesthetic and ecological integrity of public lands and waters.
- Improve and maintain the quality of all recreational areas.
- Maintain as a top priority rehabilitation efforts designed to stop environmental degradation and facility deterioration.
- Provide visitors with diverse recreational opportunities.

Facilities Management

- Evaluate and provide facilities that meet the needs of the visitors to the project.
- Maintain, develop and/or modify cost effective facilities in order to meet the changing and diverse use patterns of visitors.
- Provide visitors with the necessary facilities or services to support a
 diverse range of recreational activities, such as boating, picnicking,
 swimming, hunting, fishing, sight-seeing, wildlife viewing and
 environmental education.

Barrier-Free Access

- Increase outdoor recreational opportunities for disabled visitors by providing barrier free access by building, modifying and redesigning areas to promote accessibility and remove architectural barriers.
- Develop and modify facilities to increase recreational opportunities for disabled visitors while protecting environmental quality.
 Inspections of existing recreational areas have shown the need for increased opportunities for this user group.

Public Access, Trails and Greenways

- Conduct comprehensive project-wide evaluation of public access to public lands and waters and correct deficiencies in a manner that is responsive to public and agency needs while protecting and enhancing ecological values of the Rivers Project service area.
- Expand partnerships with others to pursue additional trail and greenway initiatives.

User Conflicts

 Identify and assess all possible alternatives to resolve any determined conflicts between navigation and recreational boats as well as other project uses.

Natural Resource Management Objectives

Administration and Management

Using a system or watershed approach, ensure that quality administration and management of project lands, waters, and other associated and natural resources is consistent and thorough. While continuing to achieve goals of sound, sustainable stewardship and safe, enjoyable public use; find effective ways to increase efficiency and cost effective management and administration. All project administrative and management decisions/actions will adhere to all applicable laws regulations, policies, and agreements. Consistent coordination, both internally and with other applicable federal, state and local government agencies, private organizations and individuals, will be maintained. All actions and/or plans will be implemented in a manner compatible with authorized project purposes and applicable social, economic and environmental factors, to insure minimum conflicts in project uses and development.

Management Philosophy

 Recognize the Mississippi River and its tributaries not only as a nationally significant transportation corridor, but also as a Congressionally-mandated national environmental treasure (WRDA 1986). To this end, the concepts of watershed sustainability will be strictly adhered to and promoted in all management decisions and actions.

Protection of Natural Resources

- Encourage the use of all project lands for public enjoyment by both consumptive and non-consumptive users while guarding against over-utilization of the resources of the riparian habitat corridors and ensuring diverse and sustainable fish and wildlife populations and their habitats.
- Provide fire, insect, disease and exotic species control through preventive and corrective measures.
- Evaluate public use on project lands and determine corrective actions when potential overuse or other conflicts on project lands develop.

Forest Habitats

- Forests will be managed for ecological integrity, erosion control, water quality protection and wildlife habitat values.
- Concentrate efforts on inventory, reforestation and protection of bottomland forests, which are quickly disappearing from both Illinois and Missouri. Remaining tracts of bottomland forest show major quality deficiencies. The floodplain forest provides high quality wildlife habitats, recreation and scenic values.

Wetlands

 Reclaim, protect, restore, and maintain high-quality wetland habitats for all fish and wildlife wetland species.

Soils

- Base all land management activities on soil types and their land use capabilities.
- Prevent soil erosion.
- Maintain appropriate conservation practices on all agricultural areas, such as no till farming, filter strips, and waterway protection, as recommended by the NRCS.

 Implement conservation measures designed to prevent soil loss, such as conversion to permanent vegetative cover, water drainage control, stream bank protection, where problems exist.

Environmental Compliance Objectives

Water Quality

- Seek to improve the general water quality of the river system in cooperation with the USFWS, IDNR, MDC, NRCS and EPA, and the MDNR and Illinois EPA.
- Strive to eliminate the need for contaminated fish and water warnings within the Rivers Project service area.
- Aggressively seek ways to work with the NRCS and other relevant agencies to reduce erosion along the river corridor, which will, in turn, reduce the silt and chemical load of the river.
- Work with our industrial partners and the EPA to find ways to reduce pollution.
- Work with local units of government to find ways to improve sewage and sanitation standards for public and private developments along the river corridor.

Rare and Endangered Species

- Complete inventories and identify existing populations of federal and state endangered and threatened plant and animal species and develop and implement recovery actions in cooperation with the USFWS and state agencies.
- Aggressively seek and/or develop management techniques and strategies where populations of endangered species exist to enhance these populations while permitting other compatible management activities to occur.

Unique or Endangered Habitats

- Inventory navigation pool lands and waters to identify and protect unique or endangered habitats in cooperation with the USFWS and state agencies.
- Implement techniques to protect and maintain unique or endangered habitats wherever they are found. (Examples of habitats types of concern are limestone bluffs, hill prairies, unique bottomland forest communities, deep backwater fisheries, fresh water springs and fens.)

Environmentally Sound Public Use Areas

- Provide a quality experience for visitors and enhance ecological integrity by continually monitoring, maintaining and improving the aesthetic and environmental quality of project resources.
- Monitor site deterioration and take actions through the ERGO process to prevent or rehabilitate areas before site impacts have any negative affects on visitor's experiences, public health and safety, or the environment.
- Develop recreational facilities and opportunities using environmental protection and enhancement techniques.
- Use aesthetic site designs, site impact hardening, vegetative buffers, natural landscaping and other practices to accomplish this objective.

Outgrants quotidian

- Phase out private exclusive use recreational cottages, and certain commercial services that could be provided on private lands and waters. Only outgrants that produce high recreational outputs and that are compatible with the Rivers Project Missions should be pursued in the future.
- Conduct periodic inspections of outgrants to ensure full environmental, safety, and administrative compliance with all applicable leases, licenses, permits, regulations and federal, state and local laws. Changes in existing uses of outgranted areas may be warranted when the general public's needs are not being met, and the land is needed for higher public purposes.

General Compliance

- Ensure that all activities, developments and other management actions comply with National Environmental Policy Act requirements.
- Ensure all activities occurring on federal public lands in the floodplain fully comply with federal, state and local laws, regulations, ordinances and other environmental protection requirements.

Visitor Information and Education Objectives

Visitor Interpretive and Outreach Services

- Develop an expanded Interpretive Services Outreach Program to provide effective and efficient distribution of Rivers Project-related information. Provide information concerning facilities and services, rules and regulations, land and water safety. Also provide information regarding Corps missions and responsibilities, navigation, river history, recreation, environmental stewardship programs and projects, etc.
- Maximize and expand non-personal services, such as visitor centers, overlooks, bulletin boards, brochures, news media and cooperating association outlets.
- Increase personal services, such as Ranger conducted interpretive programs and tours.
- Develop partnered special events, cooperating association programs, school partnerships, and distance learning.
- Ensure that all program initiatives provide project information, enhance the quality experience for the public and promote awareness and understanding of the river basin environment and the importance of sustaining its future.

Environmental Education

- Develop and expand curriculum, "hands-on" activities and educational programs that can be certified by the Illinois and Missouri State Boards of Education for the purpose of involving students, teachers and other organized groups in appropriate outdoor and classroom educational activities.
- Provide facilities and outdoor classrooms on public lands that will accommodate school groups and other organizations on a regular, dependable basis.
- Focus educational curriculum on the Mississippi River Valley history, culture, ecosystems, and other environmental science topics; water/recreation safety awareness; and protection and sustainment of the natural resources of the Mississippi River Basin.

Information Access

 Establish an electronic network and other mechanisms among local, state and federal agencies and organizations to share information on river related activities throughout the basin and make the information available to the public throughout the river basin, the nation and the world.

Shoreline Management Objectives

Environmental Stability

 Develop a Shoreline Management Plan outlining regulations and permitted activities on public owned shoreline areas that promote environmental stability.

Public lands on the river pools encompasses only a portion of the shoreline areas on the Mississippi and lower Illinois Rivers. Pressures for development and environmental protection are extreme and usually conflicting. Through extensive interagency coordination, public involvement, and Corps regulation and guidance, a shoreline management plan will be developed, implemented and enforced to ensure reasonable and orderly development or use of shoreline areas and protection for sensitive areas.

Private Exclusive Use

 Continue phasing out existing private exclusive use of shoreline areas, concurrent with Corps and national policies, to ensure equal public access to public lands and waters and to protect ecologically sensitive areas.

Permanently placed private cottages with boat docks, ramps, landings, duck blinds and mooring (fleeting areas on public lands/shoreline areas) restrict general public access and use in these areas and in some cases degrade shoreline stability, threaten habitat and increase sedimentation.

Land Use Classification

- Use the project land use classification plan to guide management for all public lands as required by federal regulation and this approved Master Plan.
- Solicit full public and interagency participation to ensure a relevant, well-balanced land use classification plan.

Navigation Management Objectives

Navigational Compatibility with Other Project Concerns

 Promote facilities, conditions, O&M activities and best management practices required to ensure efficient commercial navigation in a manner that avoids or minimizes negative impacts to environmental and recreation concerns.

Economic Impacts Objectives

Regional Economic Growth

 Contribute to and develop partnerships with agencies, groups, and individuals with the common goal of quality river region eco-tourism and sustainable economic development with effective environmental protection.

Historic Resources Management Objectives

Cultural Resources Management Plan

 Work closely with the MDNR, Illinois Historic Preservation Agency and other applicable agencies and organizations to identify historic properties and develop a management plan for historic properties that is in full compliance with all pertinent federal and state laws and regulations.